

POLYAKOV, I.Ya.; KUBANTSEV, B.S.; MEYER, M.N.; SKHOLL', Ye.D.

Some features of the morphological and ecological variability
of the lesser suslik (*Citellus pygmaeus*) in different parts of
its range. Trudy VIZR no.12:34-50 '58. (MIRA 13:5)
(Susliks)

GLADKINA, T.S., kand. sel'skokhozyaystvennykh nauk; MEYLER, M.N.,
kand. biologicheskikh nauk

Effect of ecological conditions and exterminatory measures
on the different ages in the lesser suslik population. Trudy
VIZR no.12:189-200 '58. (MIRA 13:5)
(West Kazakhstan Province--Susliks)

GLADKINA, T.S.; MEYER, M.N.; MOKEYEVA, T.M.

Morphological and physiological characteristics of two subspecies
of the steppe lemming *Lagurus lagurus abacanicus* Serebr. and L.
L. *agressus* Serebr. Zool. zhur. 41 no.2:260-274 F '62.
(MIRA 15:4)

1. Laboratory of the Forecasts, All-Union Institute of Plant
Protection, Leningrad.

(Lemmings)

MOKEYEVA, T.M., kand.sel'skokhoz.nauk; MEYER, M.N., kand.biolog.nauk

Rodents as pests of grain crops and pastures in the Tuva A.S.S.R.
Zashch. rast. ot vred. i bol. 8 no.1:26-27 Ja '63. (MIRA 16:5)
(Tuva A.S.S.R.--Rodent control)

GLADKINA, T.S.; MEYER, M.N.; MOKEYEVA, T.M.

Intraspecific variations in small rodents. Dokl.AN SSSR 148
no.4:962-965 F '63. (MIRA 16:4)

1. Vsesoyuznyy institut zashchity rasteniy. Predstavleno
akademikom Ye.N.Pavlovskim.
(Zoology-Variation) (Rodentia)

MEYER, W., inshore.

Building a specialized pusher-tug fleet. Rech.transp. 14 [1.e. 15]
no.3:21-22 Mr '56. (MLRA 9:8)
(Tugboats) (Shipbuilding)

MEYER, N., inzh.

Prospects for developing designs of cableless coupling devices.
Rech. transp. 19 no.3:26-31 Mr '60. (MIRA 14:5)
(Towing)

MEYER, H.

Semiautomatic coupling for navigation on lakes. Rech.transp.
19 no.7:20-23 J1 '60. (MIRA 13:8)
(Inland navigation) (Towing)

IVANENKO, V., inzh.; (1911-1912, 1-1912)

Automatic coupling of mechanisms. Mech. transp. 20 no. 1:26
Ja '11. (1911-1912) (1911-1912)

(Automatic coupling of mechanisms) (Tugboats)

RYZHOV, L., kand.tekhn.nauk; MEYER, N., inzh.; PETLITSKIY, Yu., inzh.

Results of testing automatic linkages. Rech. transp. 20 no.5:18-
22 My '61. (MIRA 14:5)

(Towing)

MEYER, N., inzh. (Gor'kiy)

Automatic coupling for ships. Tekh.mol. 29 no.8:14 '61.

(MIRA 14:11)

(Couplings)

(Automatic control)

MAYNAR, N.R.

Upper Pleistocene flora in the Valdai Hills. Vestn. Mez. na. Ser.
6: Biol., pochv. 20 no.2:10-12. Mr-Apr '45.

(MIRA 18:5)

1. Kafedra vysshikh rasteniy Moskovskogo universiteta.

MEYER, R.S., veter. vrach

Media for the bacteriological study of meat for Salmonella.
Veterinariia 42 no.10:94 0 '65. (MIRA 18:10)

1. Kalininskaya nauchno-proizvodstvennaya veterinarnaya laboratoriya.

MEYER, S.G., MURGATROY, E.H.; PA. PAT. 3,171,171.

Mobile unit for the low-temperature separation of gas. 1965.
no. 6413-17 '65.

1. Bashnefteproyekt.

MEYER, V.A.

Effect of drill shot on the nature of PS anomalies in bore holes
of ore deposits. Uch. zap. LGU no.278:119-123 '59.

(MIRA 13:2)

(Electric prospecting)

MEYER, V.A.

Factors affecting measurement results in the electrode potential
method. Uch. zap. LGU no.278:124-135 '59. (MIRA 13:2)
(Electric prospecting)

S/194/62/000/004/021/105
D222/D309

AUTHORS: Meyyer, V. A. and Kuvaldin, V. A.

TITLE: Portable automatic apparatus for magnetic core sampling for semiconductors

PERIODICAL: Referativnyy zhurnal, Avtomatika i radioelektronika, no. 4, 1962, abstract 4-2-37p (V sb. Vopr. rudn. geofiz., no. 2, M., Gosgeoltekhizdat, 1961, 10-14)

TEXT: This is a short description of a portable automatic apparatus for core sampling for semiconductors developed at Leningrad University. The apparatus is designed for use with the standard core sampling recording instruments ЭС-42 (ES-42), СК-1 (SK-1), СК-100 (SK-100). The apparatus is intended mainly for work at iron ore deposits. It consists of a porous shell of 50 mm diameter and 1.5 m length, and the recording instrument. The supply source can be batteries of type ЭС (2S) or 3S, or miniature accumulators (type НКН-10 (NKN-10)) of 12 - 15 V, and the current consumption is 45 - 50 mA. The range of measuring magnetic susceptibility is from

Card 1/2

Portable automatic apparatus ...

S/194/62/000/004/021/105
D222/D309

100×10^{-6} (for 1 mm of the tracing tape) to 0.5 CGSM units. The shell contains a measuring bridge with a pickup in the form of an inductance coil, a 500 c/s oscillator and a matching stage (emitter follower). Inside the recording instrument there is a two-stage amplifier and a rectifier. The electric circuit is described and the values of the element ratings are given. The apparatus was tested in the summer of 1959 under field conditions in the working area of the Belgorod iron ore expedition, and gave satisfactory results. Diagrams obtained in pits of the Gostishev and Yakovlev deposits are analyzed, for shell speeds of 700 and 1500 m/hour. The total weight of the apparatus is about 20 kg. 3 figures. 2 references. / Abstracter's note: Complete translation. /

Card 2/2

MEYER, V.A.; KUVALDIN, V.A.; BOGDANOV, B.N.

AME-T apparatus for logging magnetic susceptibility on transistors.
Uch.zap.IGU no.303:267-273 '62. (MIRA 15:11)
(Magnetic prospecting--Electronic equipment)
(Automatic control)

L6378-66 EWT(1) CW

ACC NR: AP5026764

SOURCE CODE: UR/0286/65/000/017/0044/0044

INVENTOR: Dzhenilev, R. A.; Dolgirev, Ye. I.; Lyubavin, Yu. P.; Mezner, V. A.; Nakhbatshev, V. S.; Ochkur, A. P.; Shapkov, G. G.

TITLE: Pickup for a radiometric x-ray analyzer Class 21, No. 174285 [announced by Special Design Office of the State Geological Committee SSSR (Osoboye konstruktorskoye byuro Gosudarstvennogo geologicheskogo komiteta SSSR); Leningrad State University (Leningradskiy gosudarstvennyy universitet); and All-Union Scientific Research Institute of Exploratory Geophysics (Vsesoyuznyy nauchno-issledovatel'skiy institut razvedochnoy geofiziki)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 17, 1965, 44

TOPIC TAGS: x ray analysis, x ray equipment, radiometry

ABSTRACT: This Author's Certificate introduces a pickup for a radiometric x-ray analyzer. The unit consists of a housing and a lead shield with collimation channels at an angle. A primary gamma source and x-ray detector are located in these channels. X-radiation is recorded in ore and rock deposits under natural conditions through a window in the housing made of a material with a low atomic number located at the vertex of the angle formed by the collimation channels.

UDC: 550.839 : 621 : 308.8

Card 1/2

0701 1722

L 6378-66

ACC NR: AP5026764

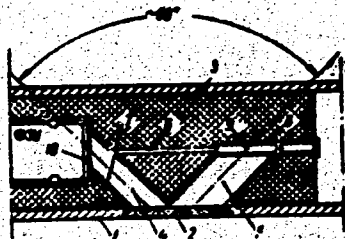


Fig. 1. 1--probe covering; 2--input window made of a material with a low atomic number; 3--lead shielding; 4--collimation channel of the detector; 5--collimation channel for the source; 6--channel for primary gamma rays used as a reference; 7--layer of material for screening out rays from the shielding; 8--can for the source; 9--source of gamma rays; 10--x-ray detector

SUB CODE: EE,EM/

SUBM DATE: 19Mar64/

ORIG REF: 000/

OTH REF: 000

OC
Card 2/2

MEYER, V.A.; NAKHABTSEV, V.S.

~~Results of using X-ray-radiometric logging in central Kazakhstan.~~
Vest.LGU 20 no.12:65-73 '65. (MIRA 18:8)

DUCHINSKAYA, Yuliya Ivanovna; CHMIBYSHEV, Aleksandr Grigor'yevich; KISELEVA, Ye.N., kand.tekhn.nauk, retsenzent; MEYER, V.K., inzh., spetsred.; RESH, G.S., red.; TARASOVA, N.M., tekhn.red.

[Production of synthetic aromatic principles] Proizvodstvo
sinteticheskikh dushistykh veshchestv. Moskva, Pishchepromizdat,
1959. 163 p. (MIRA 12:4)

(Flavoring essences)

May 1964, Vol. 1, No. 1, pp. 1-10.

Study of the ... tube ...

12.15.5 33-42

... of the ...

MEYYEROV, A.S., dotsent, kand.tekhn.nauk

Nomograph to calculate the depth of the fountain in drop
wells in round pipes. Trudy GISI no. 40:67-71 '61.

(MIRA 17:7)

MEYEROV, A.S.; KUBIN, V.N., otv. red.

[Hydraulics and applied aerodynamics] Gidravlika i prikladnaya aerodinamika. Gor'kii, Gor'kovskii inzhenerno-stroitel.in-t. Pt.2. [Aerohydrodynamics; manual] Gidroaerodinamika; uchebnoe posobie. 1964. 112 p.

(MIRA 17:10)

GOLIKOV, Ye G., kand. tekhn. nauk; MEYEROV, A.S., kand. tekhn. nauk, otv. red.

[Hydrology and hydraulic structures] Gidrologiia i gidrotekhnicheskie sooruzheniia. Gor'kii, Gor'kovskii inzhenerno-stroitel'stvo, 1961. 284 p. (MIRA 17:9)

MEYEROVA, R.A.

Clinical structure of tick-borne encephalitis in some districts
of Irkutsk Province. Trudy Irk. NIEM no. 7:58-67 '62
(MIRA 19:1)

1. Iz gorodskoy klinicheskoy bol'nitsy Irkutsk.

MEYEROVA, S.

After the seminar. Mest.prom. i khud.promys. 4 no.4:33 Ap '63.
(MIRA 16:10)

1. Glavnyy inzh. Gor'kovskoy fabriki basonnykh izdeliy.

MEYYEROVICH, M.; KOLODIZH, B.; MURASHEV, G., red.; KOLOVA, Ye.,
red.

[Get acquainted with Yaroslavl! Short essay and guide-
book] "Akom'tes", "Yaroslavl"! Kratkii ocherk-putevodi-
tel'. Izd. 2., ispr. i dop. "Yaroslavl", Verkhne-
Volzhskoe knizhnoe izd-vo, 1964. 50 p. (MIRA 18:3)

SHALYGIN, L.M.; MEYEROVICH, V.B.

Ways of accelerating the work of nonferrous metal converters.
TSvet. met. 33 no.7:16-19 J1 '60. (MIRA 13:7)

1. Leningradskiy gornyy institut (for Shalygin). 2. Belkhashskiy
gorno-metallurgicheskiy kombinat (for Meyerovich).
(Nonferrous metals--Metallurgy) (Converters)

MEYERSON V...

Сведения о деятельности в период с 1945 по 1947 гг. в
партийно-политическом отношении. В период с 1947 по 1948 гг.
в период с 1948 по 1949 гг. (MIA 134)

Сведения о деятельности в период с 1949 по 1950 гг. в
Государственном архиве - в период с 1950 по 1951 гг. в
Министерстве внутренних дел СССР.

Meijers, V.M.

Category: USSR/General Biology. Genetics.

B-5

Abs Jour: Referat Zh.-Biol., No 6, 25 March, 1957, 21566

Author : V.M. Meijers, E.R. Auzemus, F.K.S. Ku, K.I. Khsu

Inst : not given

Title : Resistance to rust in wheat and oats produced by ionizing radiation.

Orig Pub: V. sb.: Primenenie radioaktivnykh izotopov v promsti, meditsine i s. kh., M., AN SSSR, 1956, 525-532

Abstract: In order to breed types of oats and wheat resistant to stem-rust caused by Puccinia graminis tritici Eriks. Henn. and Puccinia graminis avenae Eriks. Henn., and also the kind of oats resistant to coronal rust caused by Puccinia coronata Eriks, the seeds of the originally non-resistant varieties were subjected to irradiation. Irradiated were: a variety of summer wheat Li, resistant to all rust strains except strain 15B; a variety of Ayaks oats sensitive to strain 8 of stalk rust; and a variety of Klintaf oats sensitive to

Card : 1/3

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B-5

Category: USSR/General Biology. Genetics.

Abs Jour: Referat Zh.-Biol., No 6, 25 March 1957, 21566

strain 7 of stalk rust and to many widely distributed strains of coronal rust. Doses of roentgen rays 12,000-16,000 r and thermal neutrons $9.44 \cdot 10^{12}/\text{cm}^2$ were used. The plants obtained from the treated seeds (generations X and N) were germinated alongside of a control on a provocative (?) background. In the Li variety in generations X_2 and N_2 resistant specimens were picked. All the control plants were non-resistant. In most cases generations N_3 and N_4 obtained from resistant plants of generation N_2 proved resistant, which indicates their homozygosis with respect to resistance. The generations X_3 and X_4 proved moderately resistant. In the Ayaks and Kintaf varieties among families of generation N_2 resistant specimens were also picked; in addition, several mutants were found in the oat varieties with a chlorophyll deficiency. Whether the responsibility for resistance of the treated material depends on the same loci which determine the resistance of several existing varieties or other loci, is unknown so far. Even if the resistance is de-

Card : 2/3

-3-

MEYERSON, YE.

PA 26/49T68

USSR/Medicine - Hygiene and Sanitation
Medicine - Epidemiology

Jul 48

"First Meeting of the Sanitation Epidemiological
Workers of the Uzbek SSR," Ye. Vorontsova, Ye.
Meyerson, 2½ pp

"Gig i San" No 7

Reports Meeting in Tashkent in Feb 48, their dis-
cussions on Twelfth All-Union Meeting of Med
Scientists, the activity of Uzbek SSR sanitation
organization for the last 30 years, and their tasks
in the Fourth Five-Year Plan.

26/49T68

MEYERSON, Ye. G.

YEMEL'YANOV, V.N., dotsent; MEYERSON, Ye.G.

Public health in Yaroslavl Province; 1917-1957. Sov.zdrav. 16
no.10:48-54 O '57. (MIRA 10:12)

1. Iz kafedry organizatsii zdravookhraneniya i istorii meditsiny
(zav. - dotsent V.N.Yemel'yanov) Yaroslavskogo meditsinskogo
instituta.

(PUBLIC HEALTH, hist.
in Russia)

L 50735-65 EWT(1)/FCC GW

ACCESSION NR: AP5015324

UR/0286/65/000/009/0079/0079
531.787:621.3.067.002.56

16
15
B

AUTHOR: Auzin'sh, Ya. Yu.; Brede, Ya. F.; Ventin'sh, Ya. Ya.; Meyyershteyn, A. I.

TITLE: A device for calibrating pressure transducers in hydrometeorological instruments, e.g., radiosondes. Class 42, No. 170712

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 9, 1965, 79

TOPIC TAGS: instrument calibration, meteorological instrument, radiosonde, photo cell, manometer

ABSTRACT: This Author's Certificate introduces: 1. A device for calibrating pressure transducers in hydrometeorological instruments, e.g. radiosondes. The unit contains an automatic recorder, a pneumatic system, photocells which are connected to a control unit, and a mercury manometer. The measurement arm of the manometer is connected to a pressure chamber which contains the radiosondes to be calibrated. The instrument is designed for improved efficiency and accuracy of calibration. Stationary screens are mounted along the measurement arm of the cistern-siphon manometer. These screens have diaphragms at levels which correspond to the measurement

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L 50735-65

ACCESSION NR: AP5015324

program. The device also contains a movable rack which is connected with a step mechanism and has a single aperture opposite each photo relay. 2. A modification of this device which has a photo relay mounted at the reading level and connected through a control unit to the feed for the manometer tank. In this way the level of the mercury in the neutral arm of the manometer can be automatically maintained at a constant level and errors caused by changes in atmospheric pressure and mercury evaporation can be eliminated.

ASSOCIATION: Tsentral'noye proyektno-konstruktorskoye byuro mekhanizatsii i avtomatizatsii SNKh Latviyskoy SSR (Central Planning and Design Office for Mechanization and Automation, SNKh Latvian SSR)

SUBMITTED: 20Dec62

ENCL: 01

SUB CODE: IE, ES

NO REF SOV: 000

OTHER: 000

Card 2/3

L 50735-65

ACCESSION NR: AP5015324

ENCLOSURE: 01

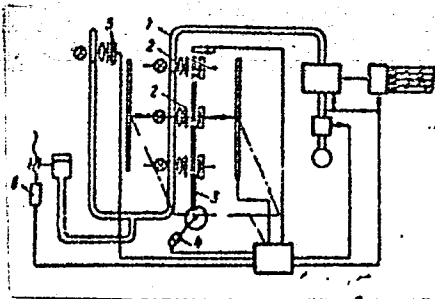


Fig. 1. 1--measuring arm of the manometer; 2--stationary elements with diaphragms; 3--movable rack connected to stepper; 4--stepper; 5--photo relay; 6--feed for the manometer tank

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Card 3/3

MEYZA, Jerzy

Ileocecal productive tuberculosis. Polski tygod. lek. 10 no.26:
875-877 27 Je '55.

1. Ze Szpitala Miejskiego Nr. 4 w Warszawie; IV Oddział Chirurgiczny
ordynator dr med. W. Kaminaki Warszawa, Żymierskiego 117 n. 14
(TUBERCULOSIS, GASTROINTESTINAL,
ileocecal hyperplastic productive, diag. & surg.)

MEYZA, Jerzy

Postoperative potassium deficiency and its therapy. Polski tygod. lek.10 no.47:1530-1533 21 Nov. '55.

1. Z IV Oddz. chirurg. Szpitala Miejskiego Nr. 4 w Warszawie;
ord: dr med. W Karinski. Warszawa, ul. Zymirskiego 117 m.14.

(POTASSIUM, deficiency,,
postop.ther.)

(POSTOPERATIVE CARE,
potassium defic. management)

POLAND / Human and Animal Physiology (Normal and Pathological). Skin. T

Abs Jour: Ref Zhur-Biologiya, No 21, 1958, 98020

Author : Meyza, Jerzy

Inst : Not given

Title : An Experiment in Treating Radiation Ulcers by Trypsin and Growth Hormone

Orig Pub: Nowotwory, 1957, 7, No 3-4, 271-278

Abstract: Successful results were obtained by application of dry powderlike trypsin (nine patients) and somatotropin (five patients). The latter is not recommended for application in presence of neoformations. --According to author's resume.

Card 1/1

MEYZA, Jerzy

MEYZA, Jerzy (Warszawa, ul. Wawelska 15.)

~~toxicity~~ of certain methods of anesthesia in surgery of the abdominal cavity. Polskie tygod. lek. 12 no. 44:1685-1688 4 Nov 57.

1. (Z IV Oddziału Chirurg. Szpitala Miejskiego Nr 4 w Warszawie; ordynator dr med. W. Kamiński).

(ABDOMEN, surg.

anesth., tox. of methods of anesth. in surg. of abdom. cavity (Pol))

EXCERPTA MEDICA Sec 16 Vol 7/9 Cancer Sept 59

*3858a. The surgical treatment of mixed tumours of the parotid gland
Operacyjne leczenie guzów mieszanych przyusznicy. MEYZA J. Oddz. Chir. Inst.
Onkol. im. Marii Skłodowskiej-Curie, Warszawa *Nowotwory* 1959, 9/1 (53-61) Tables 2
Illus. 4

The results in 75 patients are reported. In 67 cases the tumour was enucleated; in
this group there were 14.7% recurrences and 24% with injury to the facial nerve.
Altogether 84 operations were performed, and 19 patients had recurrences. The
author now uses total parotidectomy with preservation of the facial nerve (14 cases).
For evaluation of his results, follow-up is still too short. (XVI, 9)

MEYZA, Jerzy

Toxicological studies on alkylating substances used in extracorporeal circulation. Nowotwory 12 no.1:9-22 Ja-Mr '62.

1. Z Zakladu Patologii Ogolnej i Doswiadczennej Akademii Medycznej w Warszawie Kierownik Zakladu: prof. dr med. J. Walawski Z Oddzialu Chirurgicznego Instytutu Onkologii w Warszawie Kierownik Oddzialu: prof. dr med. T. Koszarowski Dyrektor Instytutu: prof. dr med. J. Laskowski.

(ANTINEOPLASTIC AGENTS toxicol)
(HEART MECHANICAL)

MEYZA, Jerzy

Trials of treatment of head neoplasms by fractionated intra-
arterial administration of antimitotic drugs. Nowotwory 12 no.3:
227-237 '62.

1. Z Oddzialy Chirurgicznego Instytutu Onkologii w Warszawie Kierownik:
prof. dr med. T. Koszarowski Dyrektor: prof. dr med. W. Jasinski.
(HEAD) (ANTINEOPLASTIC AGENTS)

MALESA, Jan; MEYZA, Jerzy; MALINOWSKI, Zbigniew.

The isotope method of quantitative examination of leakage between the isolated and systemic circulation during chemotherapeutic perfusion. Nowotwory 12 no.4:357-363 '62.

1. Z Zakładu Fizyki Instytutu Onkologii w Warszawie Kierownik: mgr. inż. J. Malesa Z Oddziału Chirurgicznego Kierownik: prof. dr med. T. Kossarowski i z Zakładu Izotopowego Kierownik: prof. dr med. W. Jasinski Dyrektor: prof. dr med. W. Jasinski.
(ANTINEOPLASTIC AGENTS) (PERFUSION)

KOSZAROWSKI, Tadeusz; MEYZA, Jerzy; MOSNIEWSKI, Andrzej; SIEMOLAK, Jan
KOŁODZIEJSKI, Tadeusz

Intramural administration of mitotic poisons before gastrectomy
(experimental studies in dogs). Nowotwory 14 no.3:201-206
Ag-S '64.

1. Z Oddziału Chirurgicznego Instytutu Patologii w Warszawie
(Kierownik: dr. med. T. Koszarowski); z Zakładu Patologii
Ogólnej i Doświadczalnej Akademii Medycznej w Warszawie (Kie-
rownik: prof. dr. med. J. Walawski); z Zakładu Anatomii Patol-
ologicznej Akademii Medycznej w Warszawie (Kierownik: doc.
dr. med. R. Stanczyk) i z Pracowni Klinicznej Instytutu Onko-
logii w Warszawie (Kierownik: dr. J. Jarmolowicz; Dyrektor:
prof. dr. med. W. Jasłowski).

MEYZA, Jerzy

Surgery in advanced stages of malignant diseases. Wlad. Lek.
18 no.5:411-413 1 Mr '65

1. Z Oddzialu Chirurgicznego Onkologii w Warszawie (Kierownik Oddzialu: prof. dr. med. T. Koszarowski).

MEYZA, Jerzy; KULAKOWSKI, Andrzej

Prolonged intra-arterial treatment of malignant neoplasms.
Nowotwory 15 no.1:11-16 Ja-Mr'65.

1. Z Oddziału Chirurgicznego Instytutu Onkologii w Warszawie
(Kierownik: prof. dr. med. T. Koszarowski; Dyrektor: prof. dr.
med. W. Jasinski).

MEYZA, Jerzy; KLEIN, Andrzej; CZERWINSKI, Wieslaw

Technic of intra-arterial infusion. Nowotwory 15 no.2:153-157
Ap-Je '65.

1. Z Oddzialu Chirurgicznego Instytutu Onkologii w Warszawie
(Kierownik: prof. dr. med. T. Kozarowski; Dyrektor: prof.
dr. med. W. Jasinski).

1. Kozarowski, T.
...ectomy in the treatment of some tumors of the parotid
gland. Izah. stomat. 18 no.8/9:1139-1144 Ag-S '65.

...działu Chirurgicznego Instytutu Onkologii w Warszawie
...ownik: prof. dr. med. T. Kozarowski'.

KOSZAROWSKI, Tadeusz; MEYZA, Jerzy

Chemotherapy in the surgical treatment of neoplasms. Pol. tyg.
lek. 20 no.26:947-948 28 Je '65.

1. Z Oddziału Chirurgicznego Instytutu Onkologii w Warszawie
(Kierownik Oddziału: prof. dr. med. T. Koszarowski).

MEYZA, Jerzy; CZEPWINSKI, Wieslaw

Combined chemico-surgical treatment of advanced melanoma. Pol. typ.
lek. 20 no.36:1362-1363 6 S '65.

1. Z Oddzialu Chirurgicznego Instytutu Onkologii im. Marii Curie-Sklodowskiej w Warszawie (Kierownik Oddzialu: prof. dr. med. T. Koszarowski).

MEYZEL, AL'BRIKHT

POLAND / Microbiology. General Microbiology

F-1

Abs Jour : Ref Zhur - Biol., No 2, 1958, No 5113

Author : Meyzel', Al'brikht

Inst : Not given

Title : Effect of Glucose and Iron on Formation of Lecithinase by Cultures of Perfringens Bacteria Group.

Orig Pub : Acta microbiol. polon., 1956, 5, Nos 1-2, 77-78

Abstract : The addition of CaCO_3 and $\text{CH}_3\text{COCOONa}$ activates formation of lecithinase by *Clostridium perfringens*, especially on a medium with glucose. Removal of iron from the medium inhibits culture development; iron does not influence formation of toxin (I). Formation of I in a medium with glucose is brought about by acidification.

Card : 1/1

MEYZEL', Maks Mikhaylovich, professor, doktor tekhnicheskikh nauk;
MAKOVSKIY, M.Ye., kandidat tekhnicheskikh nauk, retsenzent; KOZLOV,
B.P., kandidat tekhnicheskikh nauk, retsenzent; VARSEHAVSKAYA, L.S.,
redaktor; MEDVEDEV, L.Ya., tekhnicheskij redaktor

[Principles of automatic and remote control] Osnovy avtomatiki i
telemekhaniki. Moskva, Gos. nauchno-tekhn. izd-vo Ministerstva legkoi
promyshlennosti SSSR, 1956. 402 p. (MLRA 9:12)
(Automatic control) (Remote control)

MEYZEL', S. Ya.

"Studies of the Stability of the Parallel Operation of a Wind-Driven Electric Station Having an Inertia Accumulator (Fly Wheel) in a Commensurate Power System." Cand (field not given) Department of Mineral Resources, Acad Sci Kazakh SSR. (Vost Ak Nauk KazSSR, No 2, Feb 55)

SO: Sum. No. 631, 26 Aug 55-Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (14)

MEYZHI, Yu, M. —

"Influence of the Temperature of Suction Air on the Engine Admission for Various Cases of Mixture Formation." Sub 9 Jul 47, Military Red Banner Order of Lenin Aeronautical Engineering Academy imeni Prof N. Ye. Zhukovskiy

Dissertations presented for degrees in science and engineering in Moscow in 1947.

SC: Sum. No. 457, 18 Apr 55

Meyzerov, I. V.

112-2-4511

TRANSLATION FROM: Referativnyy zhurnal, Elektrotehnika, 1957,
Nr 2, p. 292 (USSR)

AUTHORS: Goshchitskaya, Ye. N., Meyzerov, I. V.

TITLE: The Φ MY-2 and the Φ MY-2II Type Electrometric Amplifiers
(Elektrometricheskiy usilitel' tipa EMU-2 and EMU-2P)

PERIODICAL: Tr. Vses. n.-i. in-ta radioveshchat. priyema i akust.,
1955, Nr 5, pp. 62-78.

ABSTRACT: The schematic diagram and construction of amplifiers intended for measuring small direct currents, or currents alternating at low frequency in high resistance circuits, or voltages in high and low resistance circuits are described in detail. The measurement ranges are: for current from $2 \cdot 10^{-14}$ to $7 \cdot 10^{-11}$ amp with an input resistance of $6 \cdot 8 \cdot 10^{-11}$ ohms and from 10^{-11} to $3 \cdot 10^{-8}$ amp with an input resistance of $1.5 \cdot 10^9$ ohms; for voltage the range is 0.01 to 50 v. The error of measurement does not exceed ± 2 per cent. The time constant does not exceed 4 sec. The insulation resistance of the input circuit at room temperature and normal humidity is not less than 10^{14} ohms. The Φ MY-2 amplifier is built, for convenience and stability of operation, as

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The MY-2 and the MY-2II Type Electrometric Amplifiers (Cont.) 112-2-4511

three independent units: an extension-type electrometric cascade with a 232 II tube; a d-c amplifier built around five 12 \times 1 π electronic tubes and the power supply unit with electronic voltage stabilization (BC-14) with 5II4C, CR-2C, CR-4C, 6C4C and the 12 \times 1 π type tubes. The amplifier along with the electrometric cascade is covered by 100 per cent negative feedback. A multiscale indicating instrument (the M-24 microammeter operating at 200 μ a was used) having the following measurement ranges was connected to the output: 0.03 to 0, 1 to 0, 3 to 1 to 3 to 10 to 30 and 100 v on the whole scale. Up to 45 - 50 v the amplitude characteristic of the 3MY-2 amplifier is linear. The 3MY-2II amplifier is an instrument of the panel type and is designed for industrial or laboratory installations of rack frame, rack bay or the back connected, switchboard type. The instruments are fed from 220 v \pm 10 per cent a-c. Photographs of the exterior of the instruments and specifications are given.

E.P.S

Card 2/2

SHAYVAKHMAN, B.Ye.; GLEKIN, G.V.; MEYZEROV, Ye.S.

Determining average values of the minimum intensity of sounds
perceptible in silence to man. Trudy Inst.biol.fiz. no.1:238-246
'55. (HEARING) (MIRA 9:9)

Country : USSR
 Category : Human and Animal Physiology, Sensory Organs T
 Abs. Jour. : Ref Zhur Biol, No. 2, 1959, No. 8532
 Author : Sheyvekhman E., Glekin G., Meyzerov E.
 Institut. : --
 Title : Individual Limits in the Ranges of Values of
 the Minimal Sound Intensities Perceived by the
 Human in Silence.
 Orig. Pub. : V sb.: Vospriyatiye zvukovykh signalov v razlich-
 akust. usloviyakh. M., AN SSR, 1956, 83--91
 Abstract : A statistical work-up of 2000 audiograms
 showed that the spread ("range") of individual
 deviations from the mean value of thresholds
 is highest between 450--2000 cycles, which is
 the range of speech, and amounts to 29--34
 decibels. In 75% of cases the deviation from
 the mean value did not exceed ± 9.5 decibels,
 while in individual cases among the remaining
 25% it amounted to 40--45 decibels.--A.D.Zh.

Card: 1/1

MEYZEROV, Ye. S., Kh. Kh. YARULLIN and A. G. KHANIN

"Experiments With Dogs."

report presented at the Conference on Influence of Ionizing Radiation upon the
Higher Developed Parts of the Central Nerve System, Inst. of Higher Nervous
Activity, AS USSR. 8-10 May 1958.

MEYZEROV, Ye.S.

Effect of fractional whole-body X irradiations on conditioned reflex activity in dogs. Biofizika 4 no. 4:460-470 '59.

(MIRA 14:4)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.
(CONDITIONED RESPONSE)
(X RAYS—PHYSIOLOGICAL EFFECT)

LIVSHITS, N.N.; MEYZEROV, Ye.S.

Effect of prolonged action of conditioned stimuli previously combined with X irradiation on the leucocyte and lymphocyte content of peripheral blood. Radiobiologiya 1 no.2:223-226 '61. (MIRA 14:7)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.
(X RAYS--PHYSIOLOGICAL EFFECT) (LEUCOCYTES)
(CONDITIONED RESPONSE)

L 47293-66 REC(k)-2/EMT(1)/FCC/PSS-2 SGTB TT/DD/RD/GW

ACC NR: AP6031663

SOURCE CODE: UR/0216/66/000/005/0625/0643

AUTHOR: Frank, G. M.; Livshits, N. N.; Arsen'yeva, M. A.; Apanasenko, Z. I.;
Belyayeva, L. A.; Golovkina, A. V.; Klimovitskiy, V. Ya.; Kuznetsova, M. A.;
Luk'yanova, L. D.; Meyzerov, Ye. S.

70
69
B

ORG: Institute of Biological Physics, AN SSSR (Institut biologicheskoy fiziki AN SSSR)

TITLE: The combined effect of spaceflight factors on some functions of the organism

SOURCE: AN SSSR. Izvestiya. Seriya biologicheskaya, no. 5, 1966, 625-643

TOPIC TAGS: central nervous system, biologic oxidation, biologic metabolism, reflex activity, brain tissue, radiation effects, ~~ionizing~~, radiation biologic effect, ~~ionizing~~, radiation

ABSTRACT: Results of experiments studying the combined effect of spaceflight factors (acceleration, vibration, and radiation) on some functions of the organism (brain hemodynamics, CNS functions, and cell division of hematopoietic organs) are discussed. Tolerance of the CNS to accelerations depends significantly on changes of brain hemodynamics during accelerations. Brain blood flow in rabbits subjected to centrifugal accelerations in the head-foot direction (5 G in head region and 10 G in pelvis region) for 12 to 60 sec decreased. This reaction was insignificant during the first exposure, sharply increased during repeated exposure, and weakened after chronic exposure, thus indicating that tolerance to accelerations can be

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UDC: 611.8:629.195.2

L 47495-56
ACC NR: AP6031663

increased by training. Participation of CNS reflex mechanisms in these processes is probable. The 15-min exposure of guinea pigs to radial accelerations (8 G), centrifuged twice with a one-day interval, increased the spontaneous bioelectrical activity of extensor muscles; however, the effect was not lasting. It was lowered the day after the second centrifugation and was essentially the same as the control from the sixth day. The 15-min exposure of the animals to vibrations (70 cps, 0.4 mm amplitude), twice with a one-day interval, produced less distinct but more stable changes, with normalization more than 25 days after the first vibration exposure. Changes in myoelectric activity during spaceflight (Sputnik-4) incorporated features of both acceleration and vibration effects, appreciably exceeding them in intensity. Oxidation processes in brain tissues, judged by PO_2 and "oxygen test" results, were initially increased in intensity by the effect of vibrations (using the above parameters), and subsequently underwent phase changes, including depression of oxidation metabolism during the aftereffect period. Changes in unconditioned defense and vestibulotonic reflexes and upper nervous activity were observed later than 12 days after vibration. Inhibition of food-procuring conditioned and defensive unconditioned reflexes in the majority of animals, with pronounced parabolic phenomena, was also found. Exposure to 8-, 10-, and 20-G accelerations and vibration (700 cps, 0.005 mm, 60 min) resulted in decreased mitotic activity of bone-marrow cells for 30 days. Disturbances of cell division involved chromosomal stickiness and increase in the number of chromosomal aberrations. Ionizing radiations and the above dynamic factors produced a similar effect on oxidation metabolism in brain tissues and cellular division in hematopoietic organs. They differed

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L 47293-66

ACC NR: AP6031663

only in the level and dynamics of changes caused. The combined effect of irradiation and dynamic factors either did not exceed or was less than the effect of each of the indicated factors separately, a phenomenon seen as a radioprotective action of dynamic factors. The relations observed are similar to phenomena of dominance and parabiosis. Typical radiation reactions were intensified when irradiation was combined with factors having directly opposed effects. The variation and complexity of results of the combination of dynamic factors and irradiation are explained by the multiplicity of the mechanisms of the combined effect of radiation and nonradiation factors. The combined exposure to vibration and whole-body acute irradiation at a lethal dose shows that in a majority of cases the vibration effect on metabolism and CNS function was dominant at early stages, while that of irradiation prevailed at later stages. At the latest stages of exposure, the combined effect of vibration and irradiation was diverse and complicated. According to some indices, the trend of changes corresponded to the effect of one of the factors while the dynamics of the processes reflected the effect of the other one. Under the uniform action of both factors, the phenomena of partial summation of weakening of the radiation effect, and in several cases of a sharp increase of radiation effect by the opposite action of the vibration effect, were observed. Probable mechanisms of the phenomena described are considered. Orig. art. has: 13 figures.

{SW}

SUB CO: 06/ SUBM DATE: 14Dec65/ ORIG REF: 032/ OTH REF: 008/ ATD PRESS:

5095

Card 3/3

L 07474-67 EWT(1) SCTB DL/70

ACC NR: AT6025374

SOURCE CODE: UR/0000/66/000/000/0068/0080

AUTHOR: Livshits, N. N.; Mayzerov, Ye. S.

ORG: none

TITLE: Influence of vertical ²vibration and ²noise on the conditioned reflexes of rats

SOURCE: AN SSSR. Institut biologicheskoy fiziki. Vliyaniye faktorov kosmicheskogo poleta na funktsii tsentral'noy nervnoy sistemy (Effect of space flight factors on functions of the central nervous system). Moscow, Izd-vo Nauka, 1966, 68-80

TOPIC TAGS: biologic vibration effect, conditioned reflex, rat, neurology, acoustic biologic effect, reflex activity, light biologic effect

ABSTRACT:

According to Soviet literature, vibration most often causes a decrease or distortion of positive conditioned reflexes. However, some researchers have reported cases of increased activity. Latent periods usually increase, but occasionally stabilize. The present study was designed to obtain additional data on the effects of whole-body vertical vibration on higher nervous activity.

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UDC: 612.014.482

L 07474-67

ACC NR: AT6025374

The conditioned motor reflexes of rats were studied using a seven-component stereotype. A positive stimulus consisting of a 1000-cps tone ("TOH+") and light from a 2 w lamp were each used 3 times per test. Differentiation consisted of a 400 cps tone ("TOH-"), applied once per test. Food was denied animals for 4 hr before experimentation.

A total of 16 half-grown rats were used; 6 were exposed to vibration and 10 served as controls. Three experimental animals were used as controls before vibration tests. One experimental animal had unique higher nervous activity patterns and was not included in the statistically processed results. The remaining 5 experimental animals had 2 similarly behaved partners each in the control group.

Experimental animals were exposed to whole-body vertical vibration with an amplitude of 0.4 mm and frequency of 70 cps for 15 min. During the experiments the control partners were exposed to noise (75 db) from the vibration stand in nearby individual containers. The first and second exposures to vibration were separated by a two-week interval; the second and third exposures were separated by a one-week interval. Some results of these tests are shown in the following figures.

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L 07474-67
ACC NR: AT6025374

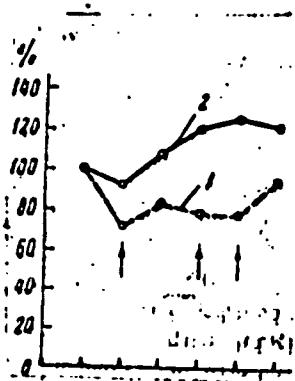


Fig. 1. The effect of vibration and noise on the mean total value of conditioned reflexes to positive stimuli. Abscissa- time after the test in weeks; Ordinate-mean total value of the strength of conditioned reflexes expressed in percent of the normal level (taken as 100%). The mean strength of the reflex before exposure to experimental parameters was determined from 20--30 tests on each mouse. Postexperimental values reflect 6 tests. 1 - mice exposed to both vibration and noise; 2 - mice exposed to noise; arrows-- exposures to experimental parameters.

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ACC NR: AT6025374

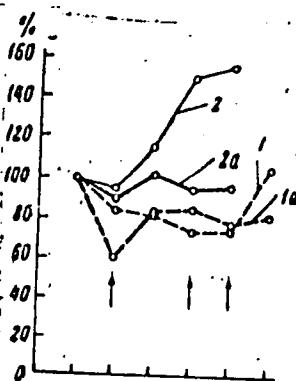


Fig. 2. The effect of vibration and noise on the mean strength of positive conditioned reflexes to a 1000-cps tone and light. Ordinate--mean strength of the conditioned reflex expressed in percent of the original value (taken as 100%). 1a, 2a -- 1000 cps tone; 1,2 light, Same conditions as for Fig. 1

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L 07474-67

ACC NR: AT5025374

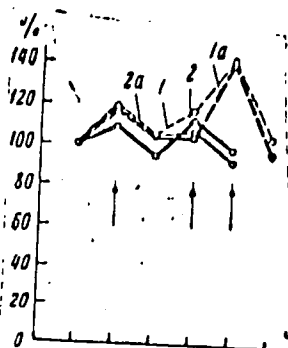


Fig. 3. The effect of vibration and noise on the mean latent periods of conditioned reflexes. Ordinate -- mean values of latent periods expressed percent of the original value (taken as 100%). 1a, 2a-1000 cps tone; 1,2-light; same conditions as for Fig. 1

From the figures it can be seen that there were significant differences between the combined effects of vibration and noise and the effect of noise alone. In the first case a general inhibition of conditioned reflexes was observed. The second parameter produced a significantly less pronounced local inhibition in the auditory analyzer. These changes in conditioned reflex activity of rats occurring under vibration/noise condi-

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L 07474-67

ACC NR: AT6025374

tions depend on individual features of higher nervous activity and on the initial level of conditioned reflex. In rats with a high level of conditioned reflex activity, development of protective inhibition was noted. In rats with a low level of conditioned reflexes, disinhibition of conditioned

reflexes and differentiation occurred.

Orig. art. has: 7 figures. [W.A. No. 22; ATD Report 66-99]

SUB CODE: 06 / SUBM DATE: 01Feb66

Card 6/6 *gd*

ACC NR: AT6036639

SOURCE CODE: UR/0000/66/000/000/0257/0258

AUTHOR: Livshits, N. N.; Apanasenko, Z. I.; Kuznetsova, M. A.; Luk'yanova, L. D.;
Meyzerov, Y. S.

ORG: none

TITLE: Combined effect of vibration and ionizing radiation on the metabolism and
function of the central nervous system /Paper presented at the Conference on
Problems of Space Medicine held in Moscow from 24-27 May 1966/

SOURCE: Konferentsiya po problemam kosmicheskoy meditsiny, 1966. Problemy
kosmicheskoy meditsiny. (Problems of space medicine); materialy konferentsii,
Moscow, 1966, 257-258

TOPIC TAGS: space physiology, combined stress, biologic vibration effect,
ionizing radiation biologic effect, muscle physiology, electrophysiology, central ..
nervous system, rat, rodent

ABSTRACT:

Rats and guinea pigs were exposed to the complex effects of vibration
(70 cps, 0.4 mm, 15 min) before, or both before and after, exposure to a
single lethal dose (500--600 r) of ionizing radiation. The effect of this
particular combination of stress factors was tested on oxidative processes
in the brain tissues, on the characteristics of the vestibular reflex, and
on the bioelectrical activity of skeletal muscles in a state of relative rest.

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ACC NR: A16036639

Results showed a complete dominance of the effects of vibration.

Completely analogous results for vestibular reflexes were obtained when vibration was combined with prolonged gamma irradiation (500 r over a 14-hr period). Vibrational effects were also dominant with respect to conditioned feeding reflexes when vibration was followed by irradiation with a dose of 50 r.

This masking of the radiation effect was observed in those cases in which the effects of the two factors tended to counteract each other. But the masking effect was also observed when influences of the two factors were analogous and could be distinguished from each other only by their magnitude or dynamics. In this last case no summation of similar effects was observed, which can be attributed to the protective effect of vibration. The protective effect was confirmed by the fact that vibration tended to weaken leukopenia produced by radiation.

At the same time results were not completely uniform. The combined effect of vibration and either acute or fractionated irradiation on the basic characteristics of the unconditioned defense reflex showed that vibrational effects were dominant in some cases and radiation effects were domi-

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ACC NR: AT6036639

nant in others. Radiation effects tended to dominate as the time after exposure increased. Investigation of the oxidative processes in the brain tissues showed no summation of analogous effects even at the later stages of the investigation. However, when observations were made of functional changes of various parts of the central nervous system, a complex combined effect of both factors was found, which does not fit the pattern of the protective effects of vibration.

The variety of changes in radiation effects due to the influence of vibration can be explained by the multiplicity of mechanisms of combined effects of radiation and vibration. The more significant factors which can affect the influence of radiation are: the oxygen effect, changes in the functional condition of the central nervous system due to effects of vibration, interaction between centers of the nervous system, the course of reparative and compensatory processes, and others. [W. A. No. 22; ATD Report 66-116]

SUB CODE: 06 / SUBM DATE: 00May66

Card 3/3

ACC NR: AT6036644

SOURCE CODE: UR/000/66/000/000/0266/0268

AUTHOR: Luk'yanova, L. D.; Kazanskaya, Ye. P.; Kol'tsova, A. V.; Meyzerov, Ye. S.

ORG: none

TITLE: Investigation of the interdependence between the functional activity of the brain and brain oxygen metabolism during stimulation by vibration [paper presented at the Conference on Problems of Space Medicine held in Moscow from 24-27 May 1966]

SOURCE: Konferentsiya po problemam kosmicheskoy meditsiny, 1966. Problemy kosmicheskoy meditsiny. (Problems of space medicine); materialy konferentsii, Moscow, 1966, 266-268

TOPIC TAGS: vibration biologic effect, central nervous system, electroencephalography oxygen consumption

ABSTRACT:

After exposure to vibration (70 cps, 0.4 mm, 15 min) a phase character in changes of various indices of higher brain sections is observed. One min after exposure to vibration, slow (1-3 cps), high voltage (500-700 v), hypersynchronized waves (HSW) were noted in the EEG's of animals. These were especially pronounced in the sensorimotor and visual cortices and coincided with a sharp increase in oxygen consumption in all sections of the brain. Repeated exposure caused a stage of HSW generalization in all brain sections subsequent to their concentration. When oxygen consumption in

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ACC NR: AT6036644

animals decreased during stressor stimulation, HSW was either irregular or did not occur.

A sharp decrease in oxygen consumption, disappearance of HSW, and manifestations of burst activity were noted after vibration in all brain sections. At the same time, a complete disinhibition of conditioned and unconditioned reflexes was noted, which indicated the development of generalized inhibition in higher brain sections. A two-wave decrease in oxygen consumption after vibration coincided in time with a two-phased intensification of the superslow potential and an intensification of hourly fluctuations. All this indicated a sharp disruption in normal functional nervous system interrelationships during this period.

The multiple application of a vibration stimulus caused an intermediate state characterized by compensation, adaptation, and relative functional normalization. A decrease in brain metabolic shifts was noted especially after vibration. The latent period of HSW development steadily increased in the visual and sensorimotor sections of the brain. Dominating rhythm in the auditory cortex and motor region of the subcortex became low-frequency (8--12 oscillations/sec), synchronized rhythms superimposed on HSW. The number of "fluctuations" and burst activity after vibration decreased and

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ACC NR: AT6036644

the duration of the normalization of these parameters was shortened after each exposure to vibration. Almost immediately after vibration, natural and conditioned reflexes were observed. The period of relative normalization during the repeated action of vibration alternated with a period of disrupted compensation and adaptation as reflected in a steady depression of rhythms during and after vibration. The level of conditioned reflexes decreased compared to normal levels and did not recover until 3 weeks after termination of the final exposure to vibration. The phase of increased oxygen consumption developing during vibration was not replaced by a decrease phase and continued to increase steadily. The artificial exclusion of peripheral impulsation by means of the partial exclusion of auditory and vestibular analyzers decreased the effect of vibration stimulus on the EEG of animals and brain metabolism. The establishment of compensatory adaptations took place without lowering the general functional level.

These data indicate that during multiple exposure to vibration, a general decrease in the excitability of the central nervous system to peripheral impulsation occurs as a result of the depletion of neural processes.

/W. A. No. 22; ATD Report 66-116/

SUB CODE: 06 / SUBM DATE: 00May66

Card 3/3

ACC NR: AT6036640

SOURCE CODE: UR/0000/66/000/000/0259/0260

AUTHOR: Livshits, N. N.; Mayzerov, Ye. S.

ORG: none

TITLE: Combined effect of vibration and ionizing radiation on conditioned-reflex activity in rats [Paper presented at the Conference on Problems of Space Medicine held in Moscow from 24-27 May 1966]

SOURCE: Konferentsiya po problemam kosmicheskoy meditsiny, 1966. Problemy kosmicheskoy meditsiny. (Problems of space medicine); materialy konferentsii, Moscow, 1966, 259-260

TOPIC TAGS: space physiology, combined stress, biologic vibration effect, ionizing radiation biologic effect, conditioned reflex, central nervous system, rat

ABSTRACT:

Experiments were performed in order to determine the combined effects of radiation and vibration on higher nervous activity. Experiments were performed on rats of the "Wistar" strain. The animals were divided into four groups. Group I was subjected to vibration (70 cps, 0.4 mm, 15 min) followed by an x-ray dose of 50 r. Group II was exposed only to radiation (same dose as above). Group III was exposed to vibration alone (as above). Group IV served as controls. The animals were exposed to the stress factors three times, with a 14-day interval between the first and second exposures

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ACC NR: AT6036640

and a seven-day interval between the second and third exposures.

After the first exposure to vibration, a weakening of conditioned reflexes was observed accompanied by a disruption of the proper power relationships. During the second week after exposure, a tendency was noted for higher nervous activity to return to preexposure levels.

Exposure to radiation caused an initial rise in conditioned-reflex activity, accompanied by correct power relationships. During the second week, a drop in conditioned-reflex activity was observed.

Rats which had been exposed to combined effects manifested primarily vibration influences during the first few days after the first exposure. During the second week after exposure, the dominant effect of vibration was replaced by a combination of vibration and radiation effects, with evidence of partial summation.

The second and third exposures to radiation caused a further drop in positive conditioned reflexes with a disruption of correct power relationships. Repeated exposures to vibration also caused a lowering of conditioned reflex activity accompanied by an increase in the number of phase

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ACC NR: AT6036640

phenomena, in approximately the same degree as after the first exposures.

Rats exposed to combined effects manifested a considerably less marked lowering of reflex activity than was observed as a result of exposure to either of the stress factors alone. According to this criterion, the effects of vibration and radiation showed results of complete summation. From certain other criteria it appeared that the effects of combined exposure resulted in an intermediate condition between the effects of vibration and of radiation. The predominant effects of vibration after repeated exposures to combined factors, which were noted by some experiments using other criteria, did not appear on the particular function being tested. In this case the effect of both factors showed summation. [W.A. No. 22; ATD Report 66-116]

SUB CODE: 06 / SUBM DATE: 00May66

Card 3/3

L 07480-67 EWT(m) GD

ACC NR: A16025383

SOURCE CODE: UR/0000/66/000/000/0180/0196

AUTHOR: Meyzerov, Ye. S.

ORG: none

TITLE: Comparative effects of total-body chronic and acute irradiation on the higher nervous activity of white rats

SOURCE: AN SSSR. Institut biologicheskoy fiziki. Vliyaniye faktorov kosmicheskogo poleta na funktsii tsentral'noy nervnoy sistemy (Effect of space flight factors on functions of the central nervous system). Moscow, Izd-vo Nauka, 1966, 180-196

TOPIC TAGS: gamma irradiation, rat, conditioned reflex, dosimetry, radiation, instrument, blood, hemoglobin, physiologic parameter, central nervous system, cardiovascular system, neuron / GUBE-800 radiation instrument

ABSTRACT:

The conditioned-reflex activity of gamma irradiated rats was studied using the Kotlyarevskiy method for monitoring the motor food response. Male Wistar rats weighing 160-180 g were exposed to stimuli as shown in Table 1.

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L 07480-67

ACC NR: AT6025383

Table 1. Experimental conditions

conditioned stimulus	stimulus duration, sec	duration of isolated stimulus action, sec
tone 1--800 cps (35 db)	10	5
red light (8-w lamp)	10	5
red light (8-w lamp)	10	5
tone 1, 800 cps (35 db)	10.	5
tone 2, 400 cps for differentiation (30 db)	10	-
tone 1, 800 cps (35 db)	10	5
red light (8 w-lamp)	10	5
tone 1, 800 cps (35 db)	10	5

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L 07480-67

ACC NR: A76025383

The interval between stimuli varied according to the position of the animal's head with respect to the feeder. Characteristics of reflex activity were established after 45--50 tests to ensure statistical reliability. In order to reveal the typological peculiarities of experimental animals, the following approaches were used: 1) prolonging differentiation up to 3 min; 2) daily starving; 3) caffeine administration; 4) effects of external inhibition; and 5) exercise before testing. After a stereotype had been established, variations in normal conditioned reflexes had been studied and typological peculiarities had been identified, the animals (which weighed 260--280 by this time) were exposed to radiation.

Chronic irradiation was administered to animals in a specially designed container which could be monitored dosimetrically. Co⁶⁰ (125 mcu) was used as the source and animals were located 80 cm from it. Dose power was 0.276 r/hr. Animals were irradiated daily for 22 hr and the total daily dose was 6.07 r. Irradiation proceeded until a total dose of

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L 07480-57

ACC NR: AT6025383

160 r had accrued.

Acute radiation took place in a GUBE-800 apparatus, where the dose power was 85 r/min and the total dose was 160 r (2 min).. Both chronically and acutely irradiated animals were examined for 100 days.

Neither chronic nor acute irradiation affected body weight or general habits. It did, however, bring about a decrease in the number of leukocytes and erythrocytes, and in peripheral blood hemoglobin content.

It was found that chronic irradiation sharply affects higher nervous activity. After severe disruptions of higher nervous activity during the first days of irradiation, a phase of moderate improvement developed, which had no influence on the final irradiation effect.

Chronic and acute irradiation had similar effects on the conditioned-reflex activity of rats. However, experimental results showed that chronic irradiation has a more profound effect, according to some higher nervous activity indices monitored. While this effect was noticeable (and statistically reliable), it was not great.

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ACC NR: AT6025383

More pronounced general decreases in peripheral blood components were observed in chronically irradiated animals. Central nervous system reactions to chronic radiation were generally more severe than disruptions noted during acute radiation.

The results of these tests differ from data obtained by some foreign researchers, which indicate a direct dependence between dose power and the magnitude of CNS disruption in the 1000-r range. It is therefore proposed that different mechanisms are responsible for radiation effects in different dose ranges. In particular, vascular function may play a strong role in higher dose ranges. The fact that chronic irradiation had a profound effect on higher nervous activity may indicate that a higher number of functionally active neurons are affected under these conditions. The author thanks Doctor of Biological Sciences

N. N. Livshits for suggesting the topic and directing the work. Orig. art. has: 7 figures and 2 tables. [W.A. No. 22; ATD Report 66-99]

SUB CODE: 06 / SUBM DATE: 01Feb66

Card 5/5

MEYZIKOVA, A. A .

BARDYSHEV, I.I., doktor khimicheskikh nauk; GUSAKOVA, M.V., inzhener;
ERILANE, A.F., inzhener; MEYZIKOVA, A.A., inzhener.

Quality of turpentine oil. Der 1 lesokhim.prom. 3 no.8:12-15 Ag '54.
(MIRA 7:8)

1. Kiyevskiy lesokhimicheskiy zavod (for Erilane, Meyzikova) 2. Tsentral'nyy nauchno-issledovatel'skiy lesokhimicheskiy institut (for Bardyshev, Gusakova)
(Turpentine)

KALINICHUK, Ye.M.; MEYZIKOVA, A.Ye.

Rapid method for detection of water in turpentine. Ukrain. Khim. Zhur. 18,
76-81 '52.

(MLRA 6:4)

(CA 47 no.22:12835 '53)

BARDYSHEV, I.I.; ERILANE, A.F.; MEYZIKOVA, A.Ye.

Improving the process of manufacturing ester gum. Gidreliz. 1 lesokhim.
prom. 9 no.2:12 '56. (MLBA 9:7)

1.Institut khimii Akademii nauk BSSR (for Bardyshev).2.Kiyevskiy lesokhimicheskiy zavod (for Erilane, Meyzikova).
(Ester gums)

Meizler, D. G., Parasyuk, O. S., and Rvacheva, E. L. A
multidimensional local limit theorem of the theory of
probability. Doklady Akad. Nauk SSSR (N.S.) 60:
1127-1128 (1948). (Russian)

The authors generalize Gnedenko's result [cf. the pre-
ceding review] to multidimensional random variables. The
proof is omitted.

J. L. Doob (Urbana, Ill.).

Source: Mathematical Reviews,

Vol. 10 No. 2

Sm

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MEYZLER, D.G.; PARASYUK, O.S.; RVACHEVA, Ye.L.

Multivariate local limit theorem in the theory of probabilities.
Ukr.mat.zhur. [1] no.1:9-20 '49. (MLA 7:10)
(Probabilities)

MEYZLER, D.G.

One problem of B.V.Gnedenko. Ukr.mat.zhur. [1] no.2:67-84 '49.
(Probabilities) (MIRA 7:10)

1. MEYZNER, D. G.
2. USSR 600
4. Series
7. On a theorem of B. V. Gnedenko, Sbor. trud. Inst. mat. AN USSR, No. 12, 1949.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

Melzler, D. G. On the limit distribution of the maximal term of a variational series. *Dopovidi Akad. Nauk Ukrain. RSR*, 1950, 3-10 (1950). (Ukrainian Russian summary)

Let x_n be a sequence of mutually independent random variables with distribution function $F_n(x)$. Let

$$\xi_n = \max(x_1, \dots, x_n) \text{ and } G_n(x) = \Pr[\xi_n \leq x] = \prod F_n(x).$$

For the case $F_n(x) = F(x)$ Gnedenko [*Ann. of Math.* (2) 44, 423-453 (1943); these Rev. 5, 41] found all possible limiting distributions of sequences $G_n(a_n x + b_n)$ and gave criteria for the occurrence of the various cases. This theory is here generalized to the case of unequal components. The same problem was treated in a similar way by Juncosa [*Duke Math. J.* 16, 609-618 (1949); these Rev. 11, 375].

W. Feller (Princeton, N. J.).

gmv

Source: *Mathematical Reviews*,

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VALEYEV, A.M.; GOLEV, Yu.D.; GOLEVA, Z.N. ; GOLOVKO, R.Ye.; ZAV'YALOVA, B.A.;
ZARETSKIY, B.A.; ZVEREV, Ye.A.; LIPINSKIY, F.A.; MANGUSHEV, I.Kh.;
MEYZLER, M.Kh.; MUTOVKIN, V.A.; RUDAKOV, Ya.D.; RUKOVANOV, B.P.;
KHASANOV, G.M.; ESTRIN, Z.I.; ZUDIN, B.A., red.; BORUNOV, N.I., tekhn. red.

[Adjustment and operation of equipment in the Novo-Ufimskii Heat and
Electric Power Plant] Naladka i ekspluatatsiya oborudovaniia na Novo-
Ufimskoi TETs. Moskva, Gos. energ. izd-vo, 1961. 175 p. (MIRA 14:9)
(Bashkiria—Electric power plants)
(Bashkiria—Heating from central stations)

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AUTHOR: Luk'yanova, L. D.; Kol'tsova, A. V.; Meyzorov, Ye. S.; Kazanskaya, Ye. P.

ORG: none

TITLE: Investigation of the connection between cerebral oxygen metabolism, its electrical activity, and the conditioned reflex activity of animals after vibration

SOURCE: AN SSSR. Institut biologicheskoy fiziki. Vliyaniye faktorov kosmicheskogo poleta na funktsii tsentral'noy nervnoy sistem (Effect of space flight factors on functions of the central nervous system.) Moscow, Izd-vo Nauka, 1966, 105-124

TOPIC TAGS: bioelectric phenomenon, rat, cerebrum, biologic vibration effect, conditioned reflex, oxygen consumption, eeg, biologic metabolism, reflex activity

ABSTRACT:

Methods used in previous studies by the author were applied to this expanded study of the effects of vibration (70 cps, 0.4 mm, 15-min exposure duration, up to 30 exposures) on the cerebral activity of rats. As in a previous study, vibration caused phased shifts in some indices of the functional condition of the brain.

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The first phase, which occurred after 1--4 exposures, was characterized by the development of general inhibition in the form of decreased cerebral oxygen consumption, corresponding EEG changes, intensification of very slow oscillations of the potential, and complete elimination of conditioned reflexes.

The second phase, which occurred after the fourth exposure, was marked by the development of compensatory and adaptive processes and relative functional normalization. Diminished changes in oxygen metabolism were observed, together with corresponding EEG indexes and the recovery of natural conditioned reflexes followed by the development of artificial reflexes (those induced by experimental parameters).

The third phase, occurring after 20--25 exposures, was characterized by a general decrease in the functional activity of upper cerebral centers. Oxygen consumption decreased, bio-electrical activity during and after vibration was depressed, and conditioned reflex activity was maintained at a low level long after the last exposure. Orig. art. has: 10 figures and 1 table.

[W.A. No. 22; ATD Report 66-99]

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